

What is claimed is:

1. A method for making a cylinder for an internal combustion engine, the method comprising the steps of:

casting a cylinder housing having a cylinder wall
delimiting an interior space for accommodating a reciprocating
5 piston;

forming a control window into said cylinder wall with a
multi-step machining of said cylinder wall which includes:

a first step of forming a breakthrough in said cylinder
wall utilizing a chip removing work tool having a rotating
10 primary movement; and,

a second step of widening said breakthrough to a wanted
dimension of said control window utilizing a work tool.

2. The method of claim 1, wherein said cylinder wall contains
a flow channel enclosed therein and said control window defines
an opening of said flow channel into said interior space of
said cylinder.

3. The method of claim 1, wherein said work tool used in said
second step is a second work tool; and, said second step is
carried out with a linear primary movement utilizing said
second work tool.

4. The method of claim 3, wherein said second work tool is a
furrowing work tool.

5. The method of claim 3, wherein said second work tool is a
reaming work tool.

6. The method of claim 3, wherein, with the machining with said linear primary movement, said second work tool is aligned in a work position and is moved with a transverse thrust or feed movement of machine tool in a direction toward the control
5 window to be machined.

7. The method of claim 3, wherein machining takes place with a linear primary movement with a rotatingly driven work spindle and wherein the thrust provided for the rotational operation of said work spindle defines said primary movement of said second
5 work tool.

8. The method of claim 7, wherein for machining with said linear primary movement, said work spindle is brought into a predetermined work position in said interior space and said second work tool is rotated into an alignment at a suitable
5 attack angle with reference to the position of said control window.

9. The method of claim 8, wherein, after the end of the machining with said second work tool, an edge of said control window is wiped with rotational movements of said spindle matched to the stroke position of said second work tool.

10. The method of claim 1, wherein said chip removing work tool performs a cutting operation.

11. The method of claim 10, wherein said cutting work tool is a side-milling cutter having a cutting width corresponding to the wanted height of said control window in the axial direction

of said cylinder.

12. The method of claim 11, wherein the cutting operation takes place up to a cut of said cutting work tool into said cylinder wall which corresponds to the width (B) of said control window in the peripheral direction of said cylinder.

13. The method of claim 1, wherein said second step is carried out utilizing a contactless machining operation.

14. The method of claim 13, wherein said contactless machining operation is an erosion process.